

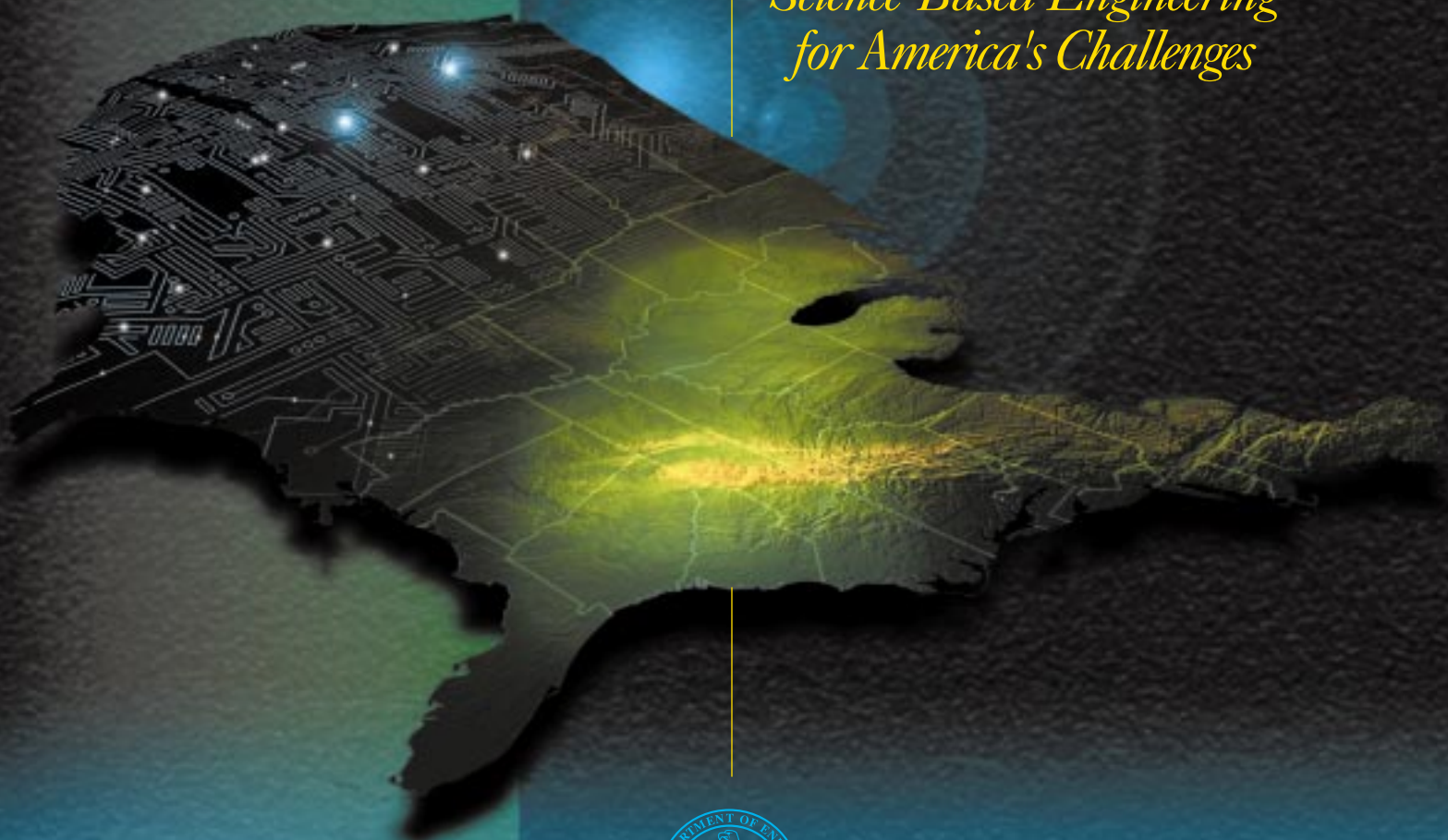


U.S. Department of Energy  
Idaho Operations Office

# *Strategic Plan*

2002 AND BEYOND

*Science-Based Engineering  
for America's Challenges*





## Preface

**T**oday, the Department of Energy Idaho Operations Office (DOE-ID), including the Grand Junction Office (GJO), Colorado, and the Idaho National Engineering and Environmental Laboratory (INEEL) is home to one of the largest concentrations of technical professionals in the northern Rocky Mountain region.

This plan focuses our resources on the highest priorities of the Department. Those priorities are: national security; advancement of the nation's energy security; and accomplishment of our environmental cleanup mission while ensuring safe, efficient, and reliable operations. The scientific, technical, and programmatic activities managed by DOE-ID are aligned with current Headquarters strategic documents and the new accelerated cleanup initiative. The INEEL *Institutional Plan* and the *Detailed Work Plan* provide additional information on the specific scope, cost, and schedule needed to achieve our strategic direction. Performance expectations at the INEEL have been negotiated with our management and operations contractor and are documented in our Performance Evaluation and Measurement Plan. The work managed through the GJO is accomplished through separately negotiated task order agreements with a Technical Assistance contract.

Accomplishment of our goals, objectives, and strategies identified in this plan will be monitored through our Annual Operating Plan measures.

## Background

The Idaho Operations Office is charged with (1) overseeing operations at the INEEL, one of the nine major national laboratories operated by various industrial, university, or non-profit contractors for DOE; and (2) overseeing environmental remediation and long-term surveillance activities across the complex, an effort managed by the GJO. A significant portion of DOE-ID's current work is the completion of its cleanup mission. More than half of INEEL funding and all of GJO funding is provided by the Office of Environment Management.

The INEEL is a Federally Funded Research and Development Laboratory, operated by Bechtel BWXT Idaho, LLC, for the Department of Energy. It is a multi-program laboratory with a focus on environmental management and nuclear energy technology development. The laboratory conducts a broad range of research and technology programs for DOE and other federal agencies.



The INEEL continues to support national and international research programs that range from support for regulation of commercial nuclear power and development of advanced nuclear fuels to production of medical and industrial radioisotopes. INEEL's tradition as a leader in nuclear research continues today through its partnership with Argonne National Laboratory in the nuclear reactor technology research and development lead-laboratory role. Recently the INEEL was selected as the location of a new Fusion Fuels Research Facility that will support international research and development in fusion safety and fuels.

From its beginning as a nuclear energy research facility to its modern-day role in applied research and engineering, the laboratory has made major contributions in a broad range of science and engineering fields. First established over 50 years ago as the National Reactor Testing Station, the INEEL's initial missions were the development of civilian and defense nuclear reactor technologies and management of spent nuclear fuel. In 1951, the world's first usable quantities of nuclear power were generated at the INEEL in the Experimental Breeder Reactor-I. Since that time, over 50 experimental reactors have been built and operated at the Idaho laboratory.

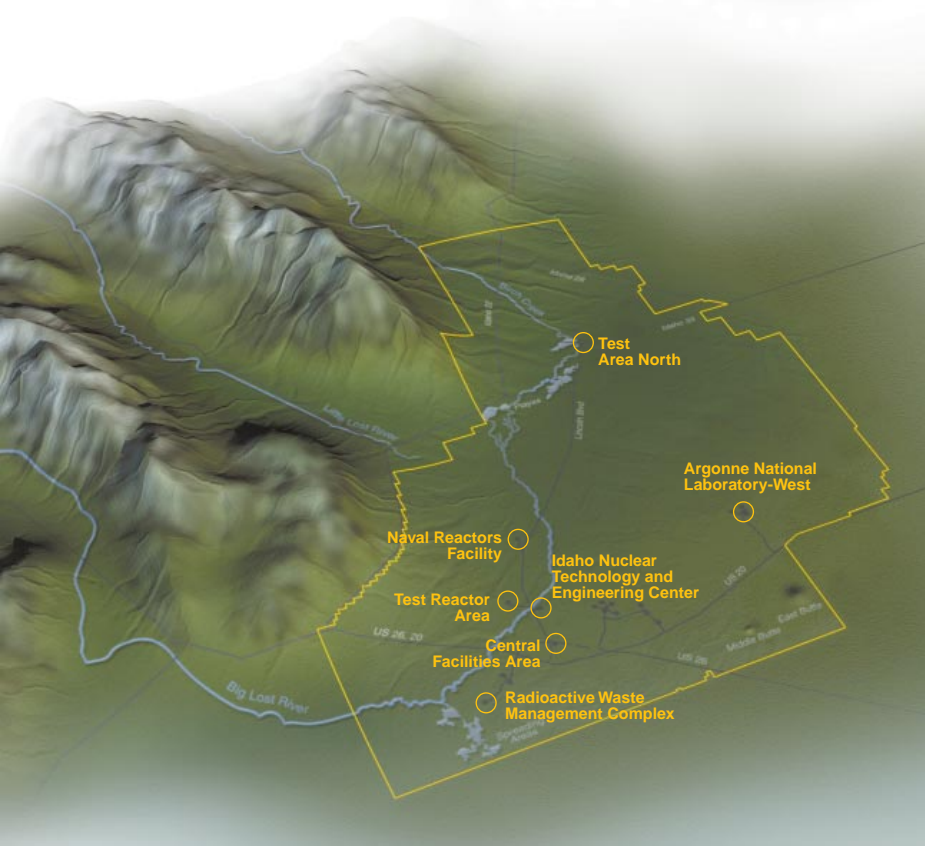
Since its inception, the INEEL has retained many of its original characteristics, not the least of which is its remote location on 889 square miles of federal land on the Snake River Plain. In 2001, INEEL employed

approximately 5,800 people, ranking it among the top five largest employers in the State of Idaho.

The infrastructure at the INEEL consists of approximately 500 buildings and more than 1,000 support structures, a full complement of utilities, 177 miles of paved roads, 56 miles of electrical transmission lines, and 14 miles of railroad line.

Alongside structures that serve as reminders of the site's history, are other facilities that support INEEL's missions. Among these are the INEEL Research Center located in the city of Idaho Falls, used for non-nuclear research and development and the Radiological and Environmental Sciences Laboratory located at Central Facilities Area, responsible for complex-wide assurance of laboratory analyses and radiation protection measurements.

The GJO, located in western Colorado, was established in 1943 to acquire uranium for the Manhattan Project.



*The INEEL occupies nearly 890 square miles of the Southeast Idaho Desert. In addition to its desert facilities, such as the Central Facilities Area (top), the INEEL has large holdings in Idaho Falls. The INEEL Research Center (above) is one of the Idaho Falls facilities.*

After World War II, GJO became the center of the “uranium boom” of the 1950s, searching for deposits of the valuable ore, conducting geologic studies, tracking domestic uranium ore reserves, and sponsoring a technology development program. Starting in the 1980s, the GJO moved on to become the first DOE facility whose primary mission was environmental restoration of uranium mining and milling sites throughout the nation.

DOE-ID, GJO, and the INEEL have become significant players in a variety of national security, energy research, long-term surveillance and maintenance, and industrial technology programs. Today, the Idaho Operations Office

works with 17 DOE Program Offices, more than 22 federal agencies, and has numerous partnerships with universities and industry. The Idaho Operations Office, including Grand Junction, maintains a federal staff of approximately 360 employees.

The INEEL is collocated with two other significant DOE programs that are overseen by other DOE entities. These are the National Nuclear Security Agency’s Naval Reactors Facility and Argonne National Laboratory–West under the purview of the DOE Chicago Operations Office. The site also maintains an active presence by the National Oceanographic and Atmospheric Administration and the United States Geological Survey.

## Our Mission and Vision

The DOE-ID/INEEL/GJO mission is:

*To develop and deliver cost-effective solutions for both fundamental and advanced problems in national security, energy security, and environmental management.*

The Department’s expectations of its operations offices and laboratories are: To ensure the national security by fostering a secure and reliable energy system that is environmentally and economically sustainable; to be a responsible steward of the Nation’s nuclear weapons; and to clean up the legacies of the Cold War.

Our mission includes supporting national security in a number of areas, including testing for the naval propulsion program, providing vehicle armor for the Army, developing sensors that can detect chemical and biological weapons, helping protect the nation’s critical infrastructure from terrorism, and a host of other areas.

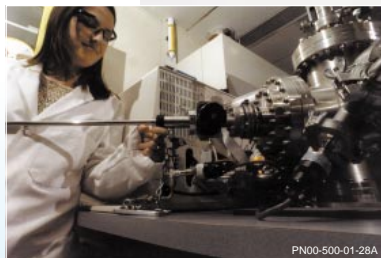
Our mission also includes energy security—specifically, promoting new or enhanced sources of domestic energy that are environmentally friendly. These range from developing advanced nuclear reactor technologies to testing electric vehicles and batteries.

Finally, our mission includes a very large element of enhancing and protecting the environment—particularly cleaning up past contamination and managing waste that was left over from Cold War activities.

The DOE- ID/INEEL/GJO vision is:

*To be an enduring national resource known for excellence in operations and the timely delivery of solutions to environmental, energy, and national security challenges.*

The following pages outline our goals, key objectives, and supporting strategies.



*In addition to national security and energy security programs such as sensor development and electric vehicle research, our mission includes a major post-Cold War environmental cleanup component.*



### GOAL

Goal NS – Deliver solutions to national security challenges.

### OBJECTIVES

Objective NS 1 – Support the Naval Nuclear Propulsion Program.

Objective NS 2 – Support the U.S. Army's armor requirements.

Objective NS 3 – Improve the INEEL core capability as a test bed for solutions to the nation's science and engineering challenges related to national security, energy security, and the environment (see Energy Security [ES]3).

*(A "test bed" is an area that can be used to not only develop new technologies, but also to safely and efficiently demonstrate these technologies on a larger scale).*

### STRATEGIES

Strategy NS 1.1 – Safely and efficiently operate and maintain the Advanced Test Reactor (ATR) plant and the Test Reactor Area infrastructure to ensure operation of the ATR for at least the next 25 years.

Strategy NS 2.1 – Maintain and enhance the Specific Manufacturing Capability to meet the Army's armor requirements.

Strategy NS 3.1 – Apply INEEL capabilities to perform critical infrastructure testing for DOE and other government agency customers.





## Environmental Cleanup

### GOAL

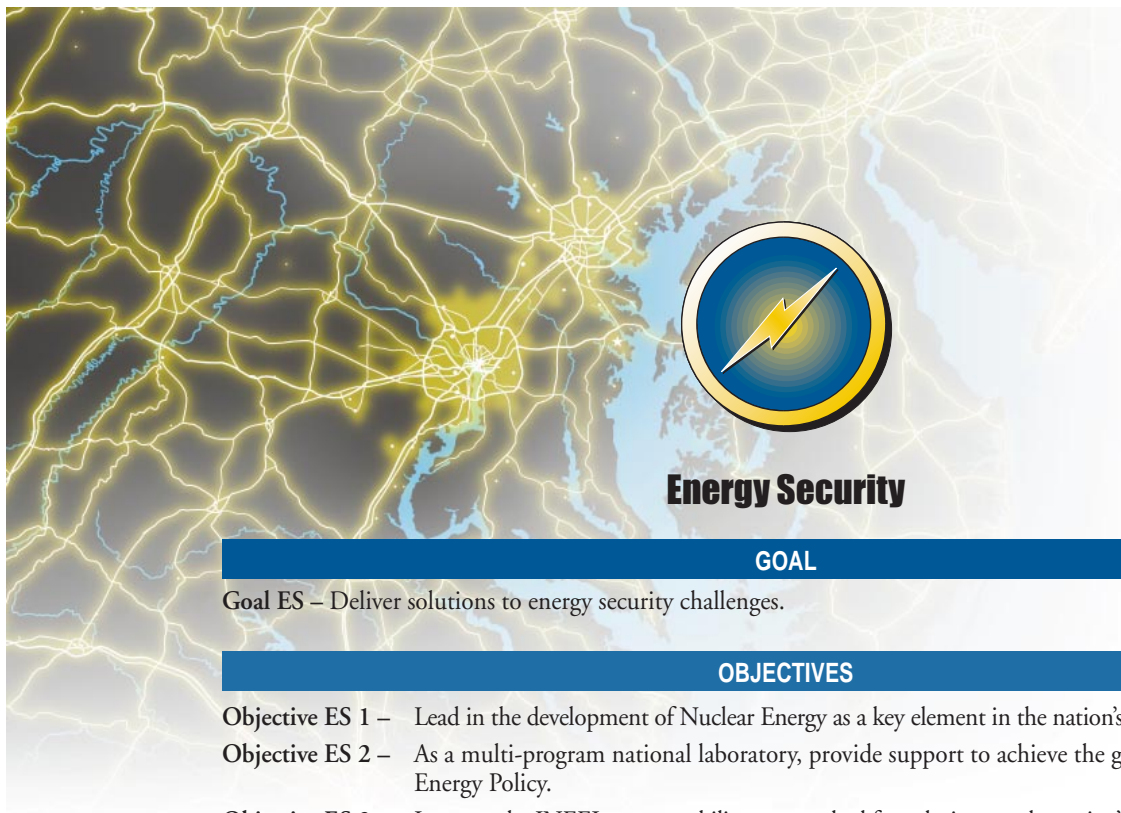
**Goal EC** – Complete environmental cleanup in a safe, cost-effective manner.

### OBJECTIVES

- Objective EC 1** – Complete the following objectives outlined in the current EM Performance Management Plan for Accelerating Cleanup of the Idaho National Engineering and Environmental Laboratory:
- Risk reduction and continued protection of the Snake River Plain Aquifer
  - Consolidation of EM activities and reinvestment into cleanup
- Objective EC 2** – Perform remediation and long-term surveillance and maintenance at Uranium Mill Tailings Remedial Action (UMTRA) and other assigned sites on schedule and budget.

### STRATEGIES

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| <b>Strategy EC 1.1</b> – Accelerate Tank Farm closure.  | <b>Strategy EC 1.7</b> – Transfer all EM-managed special nuclear material off-site.                                      |
| <b>Strategy EC 1.2</b> – Accelerate high-level waste calcine removal from Idaho.  | <b>Strategy EC 1.8</b> – Remediate buried waste in the Radioactive Waste Management Complex.                             |
| <b>Strategy EC 1.3</b> – Accelerate consolidation of spent nuclear fuel to the Idaho Nuclear Technology and Engineering Center. | <b>Strategy EC 1.9</b> – Accelerate consolidation of INEEL facilities and reduce footprint.                              |
| <b>Strategy EC 1.4</b> – Accelerate off-site shipments of transuranic waste stored at the Transuranic Storage Area.             | <b>Strategy EC 2.1</b> – Complete remediation of the Moab Project Site by 2011.  |
| <b>Strategy EC 1.5</b> – Accelerate remediation of miscellaneous contaminated areas.  | <b>Strategy EC 2.2</b> – Complete UMTRA groundwater remediation by 2011 and groundwater remediation at Pinellas by 2014. |
| <b>Strategy EC 1.6</b> – Eliminate on-site treatment and disposal of low-level waste and mixed low-level waste.                 | <b>Strategy EC 2.3</b> – Complete Monticello surface and groundwater actions with Record of Decision by FY 2004.         |



### GOAL

Goal ES – Deliver solutions to energy security challenges.

### OBJECTIVES

- Objective ES 1 – Lead in the development of Nuclear Energy as a key element in the nation's energy mix.
- Objective ES 2 – As a multi-program national laboratory, provide support to achieve the goals of the National Energy Policy.
- Objective ES 3 – Improve the INEEL core capability as a test bed for solutions to the nation's science and engineering challenges related to national security, energy security, and the environment (see NS 3).

### STRATEGIES

- Strategy ES 1.1 – Maintain world class staff and facilities at DOE-ID and the INEEL to support Nuclear Initiatives identified by the Office of Nuclear Energy, Science and Technology (NE), such as Gen IV, Early Site Permit and Nuclear Energy Research Initiatives.
- Strategy ES 1.2 – Maintain the INEEL as a viable location to site and operate a new reactor in support of commercial power reactor testing and licensing.
- Strategy ES 2.1 – Apply unique INEEL capabilities towards challenges in enhancing existing energy sources and developing new energy sources such as fusion safety, hydrogen production, and bio-energy.
- Strategy ES 3.1 – Maintain existing user facilities and maximize the user facility concept for future facilities.



## Corporate Management

### GOAL

Goal CM – Manage to ensure the safe, reliable, and efficient completion of the DOE/INEEL/GJO missions.

### OBJECTIVES

- Objective CM 1 – Complete transition to a new lead Program Secretarial Office (PSO) by 2004.
- Objective CM 2 – Further improve and enhance the use of performance based contracting.
- Objective CM 3 – Build trust and establish a spirit of cooperation with our stakeholders and regulators.
- Objective CM 4 – Perform work safely by employing the principles of Integrated Safety Management to reduce or eliminate risks to the worker, the public, and the environment.
- Objective CM 5 – Establish an infrastructure to meet EM's scientific needs and to support multi-program needs of the INEEL by FY 2006.

### STRATEGIES

- Strategy CM 1.1 – Resolve skill mix and mission alignment issues by FY 2004.
- Strategy CM 1.2 – Develop and implement a transition plan for the new LPSO by 9/30/2003. The plan will support the long term mission and vision for the laboratory.
- Strategy CM 2.1 – Review and align current management control systems to improve contract administration.
- Strategy CM 2.2 – Complete existing contract assessment; recommend/incorporate modifications in extend/compete contract structure; and propose 2005 and beyond acquisition strategy by 3/30/2003.
- Strategy CM 3.1 – Meet commitments and maintain good relations with stakeholders and the community.
- Strategy CM 4.1 – Manage mission related work based on requirements, optimal use of resources, and reduction of risk and cost.
- Strategy CM 4.2 – Improve management systems through critical self-assessment, independent assessments, and performance measurement.
- Strategy CM 5.1 – By FY 2004, provide an infrastructure needs and acquisition plan that supports accelerated cleanup and the multi-program scientific and engineering programs.
- Strategy CM 5.2 – Ensure the Subsurface Science Initiative meets Environmental Management, National Security and other mission needs.
- Strategy CM 5.3 – Ensure quality of laboratory performance at Radiological and Environmental Sciences Laboratory for worker radiation protection and environmental analyses for our customers.